

REMARKS

The Official Action mailed March 18, 2003 and the Advisory Action mailed July 25, 2003 has been received and its contents carefully noted. Filed concurrently herewith is a *Request for Two Month Extension of Time*, which extends the shortened statutory period for response to August 25, 2003. Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statements filed on June 14, 2000, July 21, 2000, and April 30, 2003. The Applicants await consideration of the Information Disclosure Statement filed November 13, 2001.

Claims 1-52 were pending in the present application. New claims 53-60 have been added to recite additional protection to which the Applicants are entitled. Claims 1-60 are now pending in the present application, of which claims 1, 8, 15, 23, 31, 36, 42 and 48 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance.

The Official Action rejects claims 1-4, 6-11, 13-18, 20-26, 28-30 and 48-51 as obvious based on the combination of U.S. Patent No. 5,153,142 to Hsieh and U.S. Patent No. 5,273,910 to Tran et al. The Official Action further rejects dependent claims 5, 12, 19, 27, 31-47 and 52 as obvious based on the combination of Hsieh, Tran and U.S. Patent No. 5,027,185 to Liauh. The Applicants respectfully submit that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present invention, as amended.

As stated in MPEP §§ 2143-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit

showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).


The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims, as amended. Hsieh and Tran do not teach or suggest that a channel region is formed so as to exclude a region where a catalyst element is introduced. This feature is supported by at least Figures 2A and 2B and in paragraph [0069] of the specification. Since Hsieh and Tran do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained.

Liauh does not cure the deficiencies in Hsieh and Tran. The Official Action relies on Liauh to teach a second conductive film of TiN. Hsieh, Tran and Liauh, either alone or in combination, do not teach or suggest that a channel region is formed so as to exclude a region where a catalyst element is introduced. Since Hsieh, Tran and Liauh do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained.

For the reasons stated above, the Official Action has not formed a proper *prima facie* case of obviousness. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,



Eric J. Robinson
Reg. No. 38,285

Robinson Intellectual Property Law Office, P.C.
PMB 955
21010 Southbank Street
Potomac Falls, Virginia 20165
(571) 434-6789